

Please amend the subject application as follows:

In the Claims

Please amend Claims 6, 7, 40, 41 and 44. Amendments to the claims are indicated in the attached "Marked Up Version of Amendments" (pages i-ii).

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- A1  
Sub B3
6. (Amended) The method of claim ~~5~~<sup>B</sup>, wherein the non-human non-inbred ES cells are mouse non-inbred ES cells and the non-human mammalian embryo is a mouse embryo.
7. (Amended) The method of claim 6, wherein the mouse non-inbred ES cells are mutant mouse non-inbred ES cells and are injected into non-human tetraploid blastocysts by piezo microinjection.
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- A2
40. (Amended) A method of identifying a candidate drug to be administered to treat a condition in a mammal in which said condition occurs, comprising producing, using the method of claim 14, a mutant mouse that is a model of said condition; administering to the mutant mouse a drug to be assessed for its effectiveness in treating or preventing said condition; assessing the ability of the drug to treat or prevent said condition, wherein if the drug reduces the extent to which said condition is present or progresses, the drug is a candidate drug to be administered to treat said condition.
- Sub B1b
41. (Amended) A method of producing a mutant non-human mammal, wherein pluripotent cells comprising at least one mutation in genomic DNA are introduced into tetraploid blastocysts of the same mammalian species under conditions that result in production of an embryo and the resulting embryo is transferred into a foster mother which is maintained under conditions that result in development of live offspring, wherein the pluripotent cells are non-inbred pluripotent cells.
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- A3  
B1b
44. (Amended) A method of producing mammalian XO F1 ES cells, comprising introducing into mammalian male F1 ES cells a negative selection marker, under conditions